



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

10/539,655

06/14/2005

John Ashton Sinclair

123-003

2921

47533 7590 11/28/2007  
INTELLECTUAL PROPERTY LAW OFFICE OF JOEL VOELZKE  
24772 SADDLE PEAK ROAD  
MALIBU, CA 90265

EXAMINER

CHAMBERS, TRAVIS SLOAN

ART UNIT

PAPER NUMBER

2833

MAIL DATE

DELIVERY MODE

11/28/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

TH

|                              |                               |                                 |  |
|------------------------------|-------------------------------|---------------------------------|--|
| <b>Office Action Summary</b> | Application No.<br>10/539,655 | Applicant(s)<br>SINCLAIR ET AL. |  |
|                              | Examiner<br>Travis Chambers   | Art Unit<br>2833                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on Remarks dated 06/14/2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 98-117 is/are pending in the application.
- 4a) Of the above claim(s) 1-97 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 98-117 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06/14/2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/17/2005, 11/23/2005</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 98-103 and 112-117 are rejected under 35 U.S.C. 102(b) as being anticipated by Walter (4150864).

In reference to claim 98, Walter teaches a longitudinally extending elongate body (11 ; figure 1) for defining a first contact surface (apart of 11); and a plurality of longitudinally spaced apart ribs (14b ; figure 1) that extend from the body (11) to respective free ends (14c ; figure 1) that are spaced apart from the first contact surface for allowing the contact (15 ; figure 1) to be progressed between the body (11) and one or more of the ribs, each rib (14b) including a respective second contact surface (17) that is opposed with the first surface wherein, upon progression of the contact (15) between the body (11) and the one or more ribs (14b), the first surface and the respective one or more second surfaces are resiliently biased into engagement with the contact (15).

In reference to claim 99, Walter teaches in which the spacing between the free ends (14c) and the first contact surface (apart of 11) is greater than the spacing between the first (apart of 11) and second contact surfaces (17).

In reference to claim 100, Walter teaches the ribs (14b) are resiliently mounted to the body (11).

In reference to claim 101, Walter teaches the ribs (14b) are resilient.

In reference to claim 102, Walter teaches the body (11) is a conductive sheet having two opposite elongate longitudinally extending edges (near lead line of top 14 ; figure 3), wherein the ribs (14b) extend from one of the edges (near lead line of top 14 ; figure 3).

In reference to claim 103, Walter teaches the body (11) includes a further conductive strip (13) that extends from the other of the edges (bottom 14 ; figure 13).

In reference to claim 112, Walter teaches the ribs (14b) restrain longitudinal movement of the contact.

In reference to claim 113, Walter teaches the conductor (pertaining to 10 ; figure 1) is formed from a continuous conductive sheet that is folded upon itself along a longitudinal fold line.

In reference to claim 114, in particular reference to "punched", the method of forming the device is not germane to the issue of patentability of the device itself. Therefore, this limitation has not been given patentable weight.

In reference to claim 115, in particular reference to "cut ", the method of forming the device is not germane to the issue of patentability of the device itself. Therefore, this limitation has not been given patentable weight.

In reference to claim 116, Walter teaches the first contact surface (apart of 11) is substantially planar and the second contact surfaces (17) are arcuate.

In reference to claim 117, Walter teaches the second contact surfaces (17) include a compound arc.

Claim 98 is rejected under 35 U.S.C. 102(b) as being anticipated by James L. Sullivan (3582864).

In reference to claim 98, James teaches a longitudinally extending elongate body (10 ; figure 1) for defining a first contact surface (18 ; figure 2); and a plurality of longitudinally spaced apart ribs (20 ; figure 2) that extend from the body (10) to respective free ends (distal end portion of 24 ; figure 1) that are spaced apart from the first contact surface (18) for allowing the contact (14 ; figure 1) to be progressed between the body (10) and one or more of the ribs, each rib (20) including a respective second contact surface (portion of 20 contacting 14 ; figure 2) that is opposed with the first surface wherein, upon progression of the contact (14) between the body (10) and the one or more ribs (20), the first surface and the respective one or more second surfaces are resiliently biased into engagement with the contact (14).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 104 is rejected under 35 U.S.C. 103(a) as being unpatentable over Walter (4150864).

In view of Balzano et al. ( 3951497)

In reference to claim 104, Walter shows substantially the invention as claimed.

However Walter does not teach the further conductive strip is used in high current applications.

Balzano teaches the further conductive strip (14 ; figure 1) is used in high current applications.

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to use the teaching of Balzano to improve the invention of Walter.

Therefore one skilled in the art would have been motivated to use the teachings of Balzano because, as taught by Balzano Col. 2line(s) 35-40, it improves the ability of the connector to operate under higher currents.

Claims 105 - 111 are rejected under 35 U.S.C. 103(a) as being unpatentable over James L. Sullivan (3582864) in view of Walter (4150864).

In reference to claim 105, James shows substantially the invention as claimed.

However James does not teach the adjacent free ends are mechanically connected.

Walter teaches the adjacent free ends (near lead line 14b ; figure 1) are mechanically connected (by 14c ; figure 1).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to use the teaching of Walter to improve the invention of James.

Therefore one skilled in the art would have been motivated to use the teachings of Walter because it improves the versatility of the ribs.

In reference to claim 106, James shows substantially the invention as claimed.

However James does not teach the adjacent free ends are mechanically connected by respective intermediate integrally formed segments.

Walter teaches the adjacent free ends (near lead line 14b ; figure 1) are mechanically connected by respective intermediate integrally formed segments (14c ; figure 1).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to use the teaching of James to improve the invention of Walter.

Therefore one skilled in the art would have been motivated to use the teachings of Walter because it increases the lifetime of the ribs and reduces deformation from use.

In reference to claim 107, James teaches an engagement face (curved distal portion of the bottom side of 24 ; figure 2) for guiding the progression of the contact (14) into biased engagement with the first (18) and second surfaces (portion of 20 contacting 14).

However James does not teach the segments collectively define with the free ends.

Walter teaches the segments (14c ; figure 1) collectively define with the free ends (near lead line 14b ; figure 1).

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to use the teaching of Walter to improve the invention of James.

One skilled in the art would have been motivated to use the teachings of Walter because it ensures better connection of the free ends of the ribs to the inserted contacts.

In reference to claim 108, James teaches in which the engagement face (curved distal portion of the bottom side of 24) is continuous.

In reference to claim 109, James teaches in which the engagement face (curved distal portion of the bottom side of 24) is opposed with and inclined away from the first surface (18).

In reference to claim 110, James teaches the engagement face (curved distal portion of the bottom side of 24) extends between an inner edge (near lead line 26 ; figure 2) and an outer edge (near lead line 18 ; figure 2) that terminates opposite the other edge (pertaining to near lead line 26).

In reference to claim 111, James teaches the first (18) and second (portion of 20 contacting 14) surfaces are biased into engagement with the contact (14), the inner edge



(near lead line 26) abuts the contact (14).

### ***Conclusion***

The prior listed on PTO form 892 that is made of record is considered pertinent to applicant's disclosure because it shows the state of the art with respect to applicant's claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Travis Chambers whose telephone number is 571-272-6813. The examiner can normally be reached on Monday-Friday 8am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula Bradley can be reached on 571-272-2001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number:  
10/539,655  
Art Unit: 2833

Page 9

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Travis Chambers  
TC  
11/7/2007



**THO D. TA**  
**PRIMARY EXAMINER**